

(PCT Article 36 and Rule 70)

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/001872

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-9 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-5 _____ received by this Authority on 23.07.2005 with letter of 21.07.2005
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/2-2/2 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>1-5</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-5</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-5</u>	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>1. This report makes reference to the following document:</p> <p>D3: US 4 813 823 A</p>			
<p>2. D3 discloses a method for producing components (drilling tools) by metallurgical injection molding, wherein:</p> <ul style="list-style-type: none"> - two molded bodies are produced from powder and binding agent mixtures (column 5, lines 13-17 and 34-36), - each molded body is subsequently compressed or shrunken by sintering to form a component having desired geometric characteristics (column 5, lines 41-45), - each molded body is subject to a debinding process by heating to sintering temperature, - in order to produce the component, two molded bodies are joined to each other during sintering through a diffusion process (column 5, line 45) in that the surfaces of the sections of the molded bodies to be joined are brought into contact during sintering (column 5, line 3,3), pressure being applied during 			

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	<p>sintering to the molded bodies to be joined (column 5, lines 37-40; column 6, lines 4-20).</p> <p>Therefore, the subject matter of claim 1 differs from D3 in that claim 1 relates to a powder metallurgical method for producing components of a gas turbine. Furthermore, D3 explicitly does not disclose any debinding process, but a certain degree of debinding takes place necessarily in the course of heating to sintering temperature.</p> <p>Therefore, the subject matter of claim 1 is novel (PCT Article 33(2)).</p> <p>3. Neither D3 nor any of the other documents cited in the search report contains anything that would prompt a person skilled in the art to use the method known from D3 in the production of gas turbine components, since drilling tools are made of materials not normally found in gas turbines.</p> <p>Consequently, the subject matter of claim 1 involves an inventive step (PCT Article 33(3)).</p> <p>4. Claims 2-5 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.</p>